aiwa

COMPACT DISC STEREO SYSTEM
SISTEMA ESTEREO CON REPRODUCTOR DE DISCOS COMPACTOS
CHAINE STEREO AVRC LECTEUR DE DISQUES COMPACTS

NSX-D77

OPERATING INSTRUCTIONS
MANUAL DE INSTRUCCIONES
MODE D'EMPLOI

En (English)

E (Español)

F (Français)

Owner's record

For your convenience, record the model number and serial number (you will find them on the rear of your set) in the space provided below. Please refer to them when you contact your Aiwa dealer in case of difficulty.

Model No. _____ Serial No. _____

For assistance and information

call toll free 1-800-BUY-AIWA (United States and Puerto Rico)

COMPACT disc DIGITAL AUDIO

8A-NF4-903-01
000224BAS-P9

U

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

"CAUTION:TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL."

Explanation of Graphical Symbols:

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION

Modifications or adjustments to this product, which are not expressly approved by the manufacturer, may void the user's right or authority to operate this product.

PRECAUTIONS

Read the Operating Instructions carefully and completely before operating the unit. Be sure to keep the Operating Instructions for future reference. All warnings and cautions in the Operating Instructions and on the unit should be strictly followed, as well as the safety suggestions below.

Installation

1 **Water and moisture** — Do not use this unit near water, such as near a bathtub, washbowl, swimming pool, or the like.
2 **Heat** — Do not use this unit near sources of heat, including heating vents, stoves, or other appliances that generate heat. It also should not be placed in temperatures less than 5°C (41°F) or greater than 35°C (95°F).
3 **Mounting surface** — Place the unit on a flat, even surface.
4 **Ventilation** — The unit should be situated with adequate space around it so that proper heat ventilation is assured. Allow 10 cm (4 in.) clearance from the rear and the top of the unit, and 5 cm (2 in.) from each side.
- Do not place the unit on a bed, rug, or similar surface that may block the ventilation openings.
- Do not install the unit in a bookcase, cabinet, or airtight rack where ventilation may be impeded.

5 **Objects and liquid entry** — Take care that objects or liquid do not get inside the unit through the ventilation openings.
6 **Carts and stands** — When placed or mounted on a stand or cart, the unit should be moved with care.
Quick stops, excessive force, and uneven surfaces may cause the unit or cart to overturn or fall.

7 **Condensation** — Moisture may form on the CD pickup lens when:
- The unit is moved from a cold spot to a warm spot
- The heating system has just been turned on
- The unit is used in a very humid room
- The unit is cooled by an air conditioner

When this unit has condensation inside, it may not function normally. Should this occur, leave the unit for a few hours, then try to operate again.
8 **Wall or ceiling mounting** — The unit should not be mounted on a wall or ceiling, unless specified in the Operating Instructions.

Electric Power

1 **Power sources** — Connect this unit only to power sources specified in the Operating Instructions, and as marked on the unit.
2 **Polarization** — As a safety feature, some units are equipped with polarized AC power plugs which can only be inserted one way into a power outlet. If it is difficult or impossible to insert the AC power plug into an outlet, turn the plug over and try again. If it is not still inserted easily into the outlet, please call a qualified service technician to service or replace the outlet. To avoid defeating the safety feature of the polarized plug, do not force it into a power outlet.

3 **AC power cord**
- When disconnecting the AC power cord, pull it out by the AC power plug. Do not pull the cord itself.
- Never handle the AC power plug with wet hands, as this could result in fire or shock.
- Power cords should be firmly secured to avoid being severely bent, pinched, or walked upon. Pay particular attention to the cord from the unit to the power outlet.
- Avoid overloading AC power plugs and extension cords beyond their capacity, as this could result in fire or shock.

4 **Extension cord** — To help prevent electric shock, do not use a polarized AC power plug with an extension cord, receptacle, or other outlet unless the polarized plug can be completely inserted to prevent exposure of the blades of the plug.

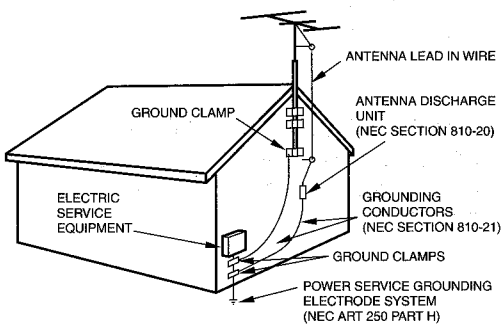
5 **When not in use** — Unplug the AC power cord from the power outlet if the unit will not be used for several months or more. When the cord is plugged in, a small amount of current continues to flow to the unit, even when the power is turned off.

Outdoor Antenna

1 **Power lines** — When connecting an outdoor antenna, make sure it is located away from power lines.

2 **Outdoor antenna grounding** — Be sure the antenna system is properly grounded to provide protection against unexpected voltage surges or static electricity build-up. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information on proper grounding of the mast, supporting structure, and the lead-in wire to the antenna discharge unit, as well as the size of the grounding unit, connection to grounding terminals, and requirements for grounding terminals themselves.

Antenna Grounding According to the National Electrical Cord


ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810-21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250 PART H)

NEC-NATIONAL ELECTRICAL CODE

Maintenance

Clean the unit only as recommended in the Operating Instructions.

Damage Requiring Service

Have the units serviced by a qualified service technician if:
- The AC power cord or plug has been damaged
- Foreign objects or liquid have got inside the unit
- The unit has been exposed to rain or water
- The unit does not seem to operate normally
- The unit exhibits a marked change in performance
- The unit has been dropped, or the cabinet has been damaged

DO NOT ATTEMPT TO SERVICE THE UNIT YOURSELF

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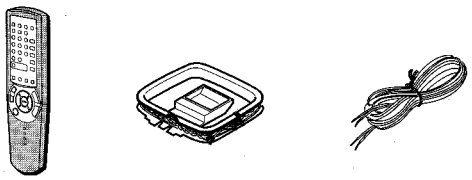
CONNECTIONS

Check your system and accessories.
CX-ND77 Compact disc stereo cassette receiver
SX-WND77 Front speakers

Remote control AM antenna FM antenna

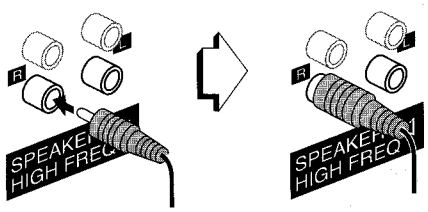


Operating Instructions, etc.

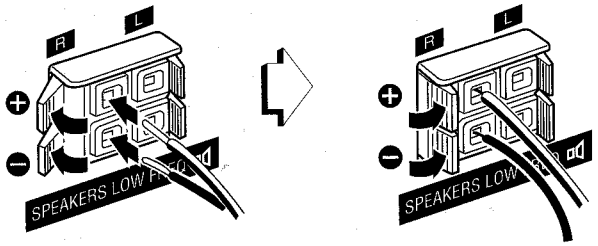
IMPORTANT
- Connect the speakers, antennas, and all optional equipment first. Then connect the AC cord.
- There are no difference between the front speakers. Both speakers can be connected as L (left) or R (right).

1 Connect the right speaker to the main unit.

① Connect the speaker cord with plug to **SPEAKERS HIGH FREQ R** terminal.



② Connect the speaker cord with the white stripe to the **SPEAKERS LOW FREQ R ⊕** terminals and the black cord to the **⊖** terminal.

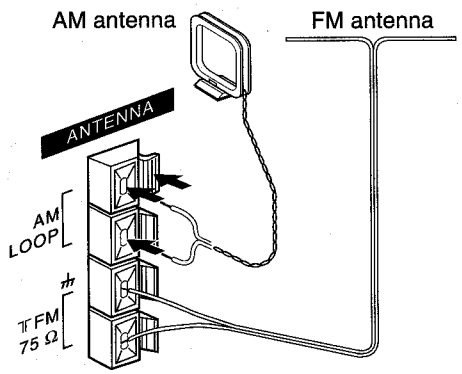


2 Connect the left speaker to the main unit.

Connect the speaker cord with plug to **SPEAKERS HIGH FREQ L** terminal, and another speaker cord to the **SPEAKERS LOW FREQ L** terminals in the same manner as step 1.

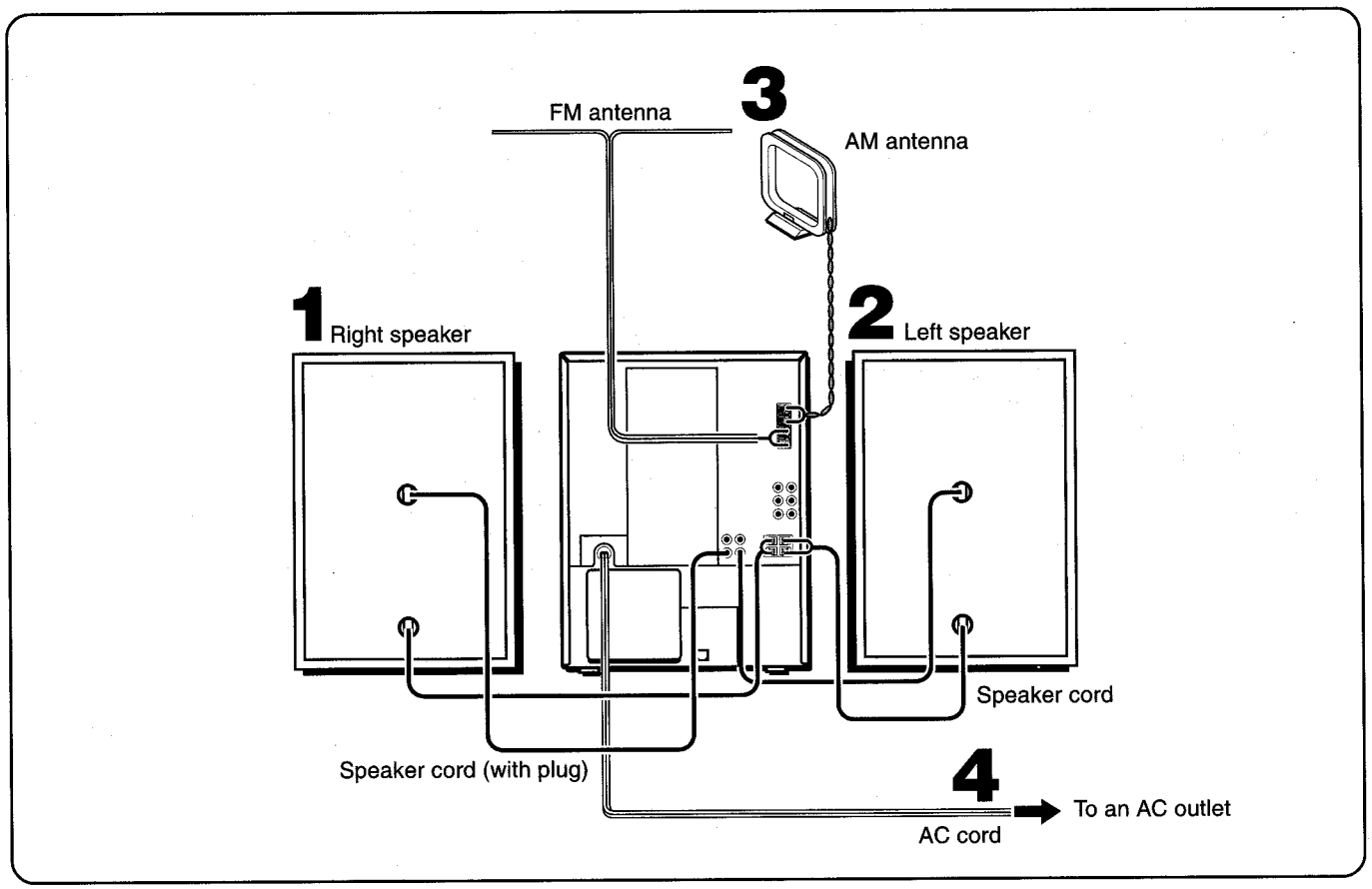
3 Connect the supplied antennas.

Connect the FM antenna to the **FM 75 Ω** terminals and the AM antenna to the **AM LOOP** terminal.



4 Connect the AC cord to an AC outlet.

- The DEMO will begin when the AC cord is plugged into an AC outlet. To deactivate the DEMO, set the clock.



To position the antennas

FM antenna:

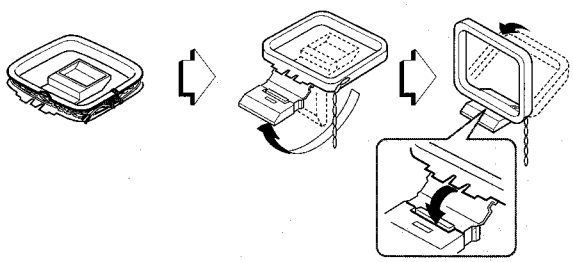
Extend this antenna horizontally in a T-shape and fix its ends to the wall.

AM antenna:

Position to find the best direction.

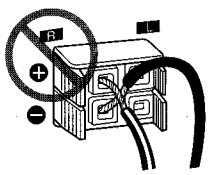
To stand the AM antenna on a surface

Fix the claw to the slot.



NOTE

- Be sure to connect the speaker cords correctly. Improper connections can cause short circuits in **SPEAKERS** terminals.

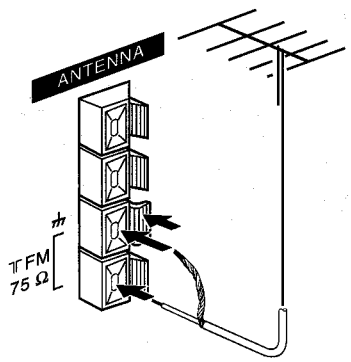


- Do not leave objects generating magnetism, such as credit cards, near the speakers, as these objects may be damaged.
- Do not bring the FM antenna near metal objects or curtain rails.
- Do not bring the AM antenna near other optional equipment, the stereo system itself, the AC cord or speaker cords, since noise will be picked up.
- Do not unwind the AM antenna wire.

CONNECTING AN OUTDOOR ANTENNA

For better FM reception, use of an outdoor antenna is recommended.

Connect the outdoor antenna to the FM 75 Ω terminals.

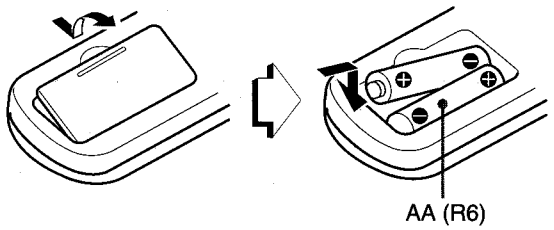


To connect other optional equipment → page 23.

REMOTE CONTROL

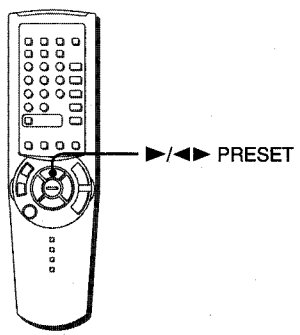
Inserting batteries

Detach the battery cover on the rear of the remote control and insert two size AA (R6) batteries.



When to replace the batteries

The maximum operational distance between the remote control and the sensor on the main unit should be approximately 5 meters (16 feet). When this distance decreases, replace the batteries with new ones.



Using the remote control

The instructions in this manual refer mainly to the buttons on the main unit. Buttons on the remote control with the same names as those on the main unit can be used as well.

►/◄► PRESET on the remote control

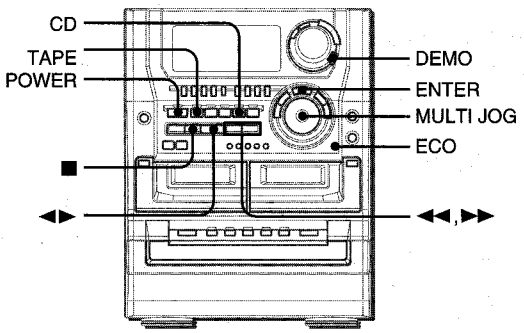
The function is the same as that of ◄► on the main unit.

NOTE

- If the unit is not going to be used for an extended period of time, remove the batteries to prevent possible electrolyte leakage.
- The remote control may not operate correctly when:
  - The line of sight between the remote control and the remote sensor inside the display window is exposed to intense light, such as direct sunlight.
  - Other remote controls are used nearby (those of a television, etc.)

En

BEFORE OPERATION



To turn the power on

Press one of the function buttons (**TAPE, TUNER, VIDEO/AUX, CD, MD**).
Playback of the inserted disc or tape begins, or the previously tuned station is received (Direct Play Function).
POWER is also available.
When the unit is turned on, the disc compartment may open and close to reset the unit.

To turn the power off

Press **POWER**.

Illumination guides

Whenever one of the function buttons is pressed, the buttons for that operation light up or flash.

Flash windows

The windows of the cassette decks light up while the unit is being powered on.
To turn off the light of the cassette decks, press ■ while pressing **TAPE**. To turn back on, repeat the above.
• Do not perform this operation during recording.

To change the brightness level of the display

1 Press **ECO** repeatedly until "DIM MODE" is displayed.
2 Within 4 seconds, press **ENTER**.
3 Within 4 seconds, turn **MULTI JOG** to select the dimmer mode as below.

DIM-OFF ↔ DIMMER 1 ↔ DIMMER 2 ↔ DIMMER 3

"DIM-OFF" mode is the brightest and "DIMMER 3" mode is the dimmest. In "DIMMER 3" mode, the spectrum analyzer, the window of the cassette decks and the button illumination light off in addition.
4 Within 4 seconds, press **ENTER**.

DEMO (DEMONSTRATION)

When the AC cord is plugged for the first time after purchase, the DEMO will begin in the display. When the power is turned on, the DEMO will end.
Until the clock is set, the DEMO will automatically begin whenever the power is turned off.

You can enjoy two kinds of DEMO modes on the unit.
One is *demo*, the other one is *game demo*.
In the demo mode, colorful illumination demonstrates on the display.
In the game demo mode, you can play game.
See below about how to play the game.
To switch the two modes to each other, press **POWER** while pressing **DEMO** when the power is off.

To deactivate or activate DEMO

Press **DEMO** to turn on or off the DEMO mode.

To play the game demo

***1* Press ◄►.**
Three numbers on the display start to run.

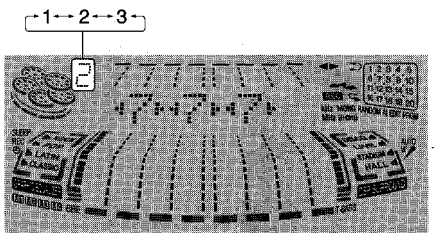
***2* Press ■ once.**
The number on the left side stops.

***3* Press ■ twice to stop the remaining two numbers.**
Scoring:
20 points are given to start the game.
If all the numbers are equal, 50 points are added to the score.
If not equal, one point is subtracted.
If the gained points reach 9999, you win.
If the gained points fall to 0, you lose.

To reset the game Demo, press **DEMO** twice.
To cancel the game Demo, press **DEMO**.

To change the probability of equalizing the three number

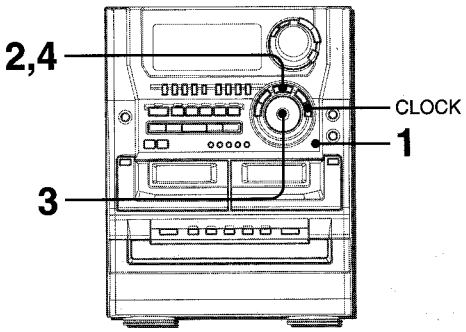
Press ◄◄ or ►► repeatedly to select one of the three probability levels when playing the game Demo. The tray number indicator in the display changes between 1 and 3. As the tray number increases from 1 to 3, the higher the probability of equalizing.



NOTE

- While playing the game Demo, ■, ◀◀, ▶▶ and ◀▶ are available only for the game Demo. Cancel the game Demo to use these buttons for the functions such as CD playing, etc.
- During the game Demo, some indicators unrelated with the actual operation light up on the display.
- During recording , DEMO is not operative.
- The game Demo is automatically canceled if the volume is adjusted while the unit is turned on.

SETTING POWER ECONOMIZING MODE

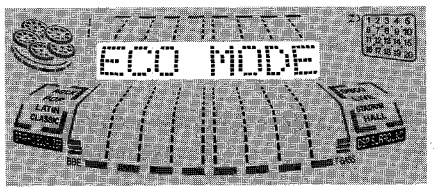


When you set power economizing mode to "ECO ON" or "ECO AUTO", the unit reduces power consumption by conducting four ECO operations as follows.

- The unit (all the illumination of the display and the buttons) blacks out when the power is turned off. Only the red indicator lights up.
- If DIMMER (1-3) is selected, the illumination of the display and the buttons brighten for 10 seconds only when you press a button, or turn **VOLUME** or **MULTI JOG**.
- The display dimmer mode is set to dimmest, the button illumination lights off, and the volume is set to minimum (0) when the unit turns on by timer recording.
- In addition to the three operations of ECO ON, the unit automatically turn itself off if you do not operate it and the sound source is mute for 10 minutes (only when "ECO AUTO" is selected).

1 Press ECO.

"ECO MODE" will be displayed.

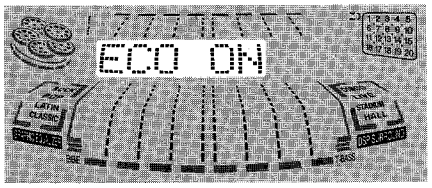


2 Press ENTER within 4 seconds.

The current power-economizing mode status will be displayed.
If the power-economizing mode is off: ECO OFF.
If the power economizing mode is on: ECO ON or ECO AUTO.

3 Turn MULTI JOG within 4 seconds to select the power-economizing mode.

Example: When "ON" is selected.



4 Press ENTER within 4 seconds to set the mode.

NOTE

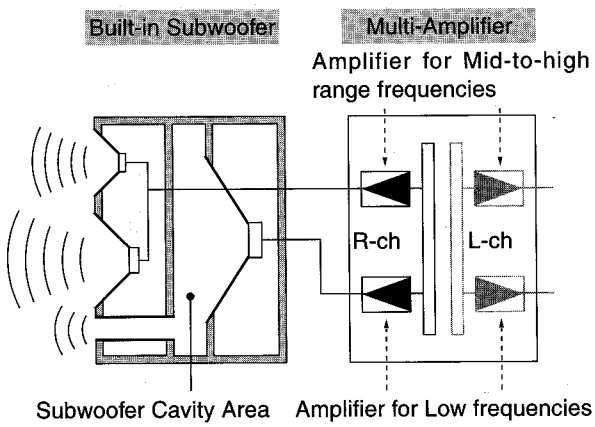
If the clock is not set, the unit does not black out.
Instead, the DEMO will begin when the power is turned off.

4-Channel Multi-Amplifier System

To provide reinforcement for the ultra-low frequencies, in addition to the Left/Right 2-channel amplifier used to reproduce mid-to-high-range frequencies, this system incorporates a second L/R 2-channel amplifier just for reproduction of ultra-low frequencies — making it, in effect, a 4-amplifier system. By utilizing discrete amplifiers for mid-to-high-frequencies and low frequencies, high-quality sonic reproduction that is virtually free from distortion can be realized.
This Multi Amplifier System, which utilizes independent circuitry for the different frequency ranges, enables superb sonic reproduction free from distortion.

Built-in Subwoofer System

The built-in subwoofer System has a separate subwoofer cavity area that is part of the loudspeaker cabinet structure, which acts as a sonic filter to cut distortion components. (In the Multi Amplifier System, the ultra-low frequency signals transmitted from their own independent amplifier are reproduced in this area.) This separate construction gives a clear, rich definition to bass reproduction and it can realize clear, well-defined mid-to-high frequency signals.
And AIWA's built-in subwoofer system incorporates a subwoofer capable of powerful, satisfying bass performance with true stereo separation.



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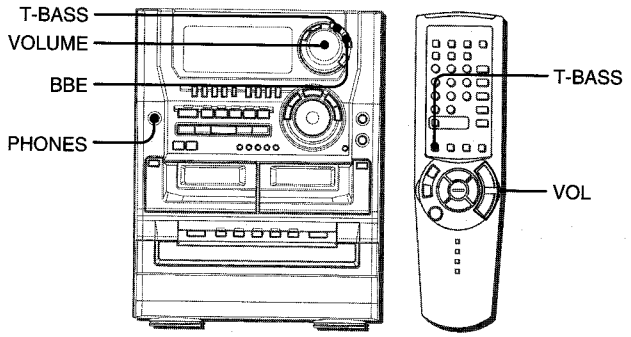
AUDIO ADJUSTMENTS

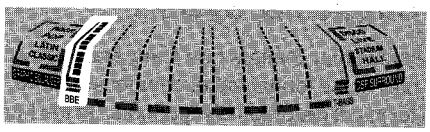


VOLUME

Turn VOLUME on the main unit, or press VOL on the remote control.
The volume level is displayed as a number from 0 to MAX (50). The volume level is automatically set to 20 when the power is turned off with the volume level set to 21 or more.

BBE SYSTEM

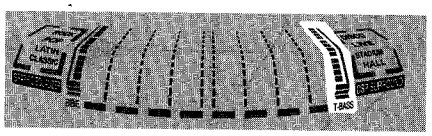
The BBE system enhances the clarity of high-frequency sound. It also enriches the KARAOKE function to make your voice sound clear and pleasant.
Press BBE.
Each time it is pressed, the level changes. Select one of the three levels, or the off position to suit your preference.



NOTE
When playing back a tape recorded with BBE, it is recommended that BBE be set to off to avoid distorted high frequency sound.

SUPER T-BASS SYSTEM

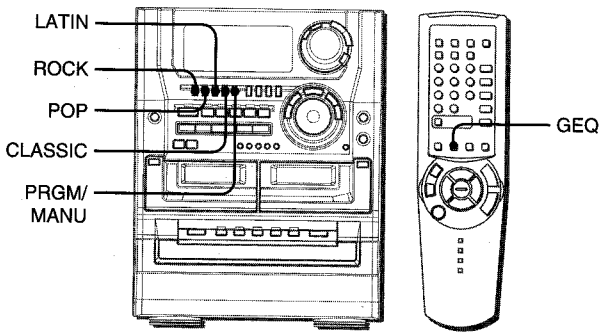
The T-BASS system enhances the realism of low-frequency sound.
Press T-BASS.
Each time it is pressed, the level changes. Select one of the three levels, or the off position to suit your preference.



NOTE
Low frequency sound may be distorted when the T-BASS system is used for a disc or tape in which low frequency sound is originally emphasized. In this case, cancel the T-BASS system.

GRAPHIC EQUALIZER (GEQ)

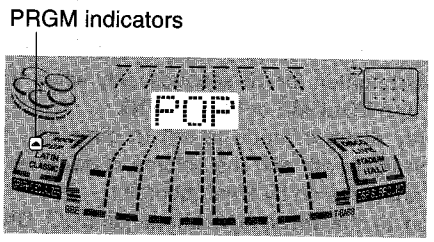
SELECTING THE PROGRAMMED EQUALIZATION CURVE



This unit provides four different programmed equalization curves.
ROCK: Powerful sound emphasizing treble and bass
POP: More presence in the vocals and midrange
LATIN: Accented higher frequencies for latin music
CLASSIC: Enriched sound with heavy bass and fine treble

Press PRGM/MANU so that one of the PRGM indicators is selected, and then press ROCK, POP, LATIN or CLASSIC.

PRGM indicators



To cancel the selected mode
Press the selected button again. "GEQ OFF" is displayed.

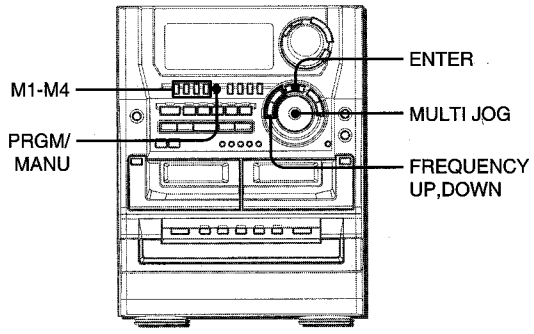
To select the equalization curve with the remote control
Press **GEQ** repeatedly until the desired equalization curve is displayed.

ROCK → POP → LATIN → CLASSIC
(Programmed mode)
GEQ OFF (cancel) ← GEQ M4 ← GEQ M3 ← GEQ M2 ← GEQ M1
(Manual mode)

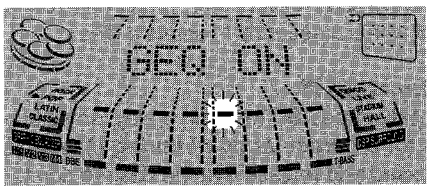
Using the headphones
Connect headphones to **PHONES** with a stereo standard plug (ø6.3 mm, 1/4 inch).
No sound is output from the speakers while the headphones are plugged in.

SETTING NEW EQUALIZATION CURVES MANUALLY

Up to four equalization curves can be stored as the manual modes M1-M4.



1 Press FREQUENCY UP or FREQUENCY DOWN to select a frequency.
The level indicator of the selected frequency flashes.



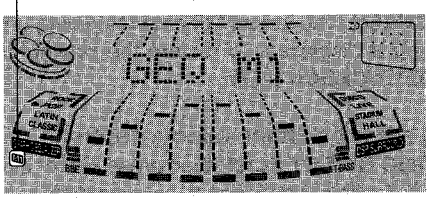
2 Turn MULTI JOG to adjust the level of the selected frequency.

3 Repeat steps 1 and 2 to make the desired equalization curve.

4 <u>Within 4 seconds</u>, press ENTER.
"MEMORY" is displayed for 8 seconds.

5 <u>Within 8 seconds</u>, press one of the graphic equalizer preset buttons M1-M4.
The equalization curve is stored.

The equalization curve has been memorized to M1.



To select a manual-preset GEQ

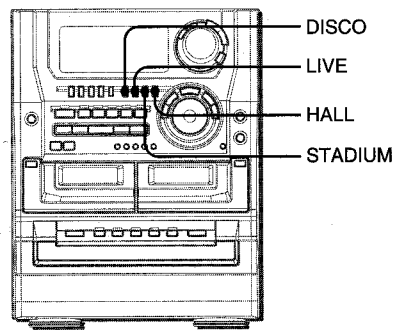
1 Press **PRGM/MANU** to select the manual mode. One of the MANUAL indicators is selected.
2 Press one of the graphic equalizer preset buttons **M1-M4**.

To cancel the selected mode
Press the selected button again. "GEQ OFF" is displayed.

DSP SURROUND

The DSP (Digital Signal Processor) SURROUND adjusts the reverb level and delay time to give a resonant surround sound during playback, allowing you to enjoy the real sound presence of different environments.
This unit has been programmed with 4 different DSP SURROUND modes.

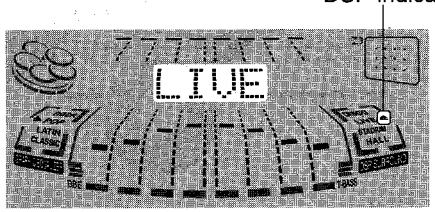
SELECTING A PROGRAMMED DSP SURROUND MODE



When you select the programmed DSP SURROUND mode, the sound presence of a disco (DISCO), live music performance (LIVE), stadium (STADIUM) or concert hall (HALL) can be obtained.

Press DISCO, LIVE, STADIUM or HALL.

DSP indicator



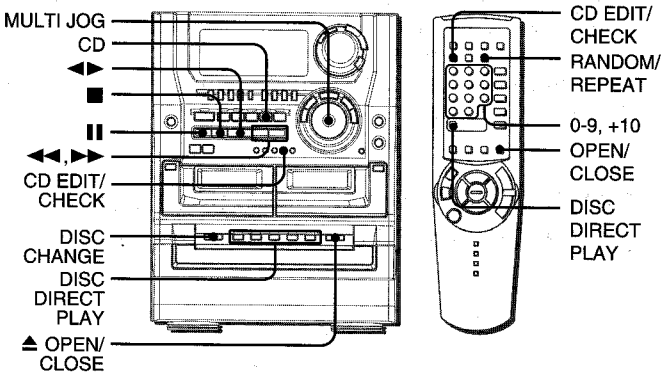
Equalization curves are selected automatically to match the DSP SURROUND modes and can also be selected or turned off to suit your preference.

When the music source is monaural
Select LIVE or STADIUM to obtain a simulated stereo effect. When DISCO or HALL is selected, no sound will be heard from the surround speakers.

To cancel the selected mode
Press the selected button again. "DSP OFF" is displayed.

NOTE
When the MIC or ECHO level is changed, the DSP SURROUND mode is automatically canceled.

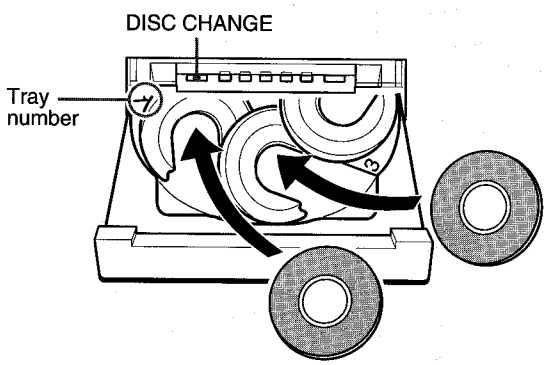
BASIC OPERATIONS



LOADING DISCS

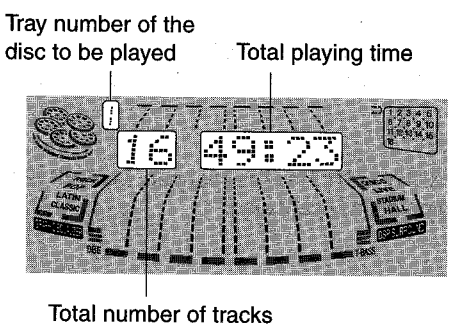
Press CD, then press ≜ OPEN/CLOSE to open the disc compartment. Load disc (s) with the label side up.

To load one or two discs, place the disc(s) on the tray(s) in the direction of the arrows as illustrated.



To load three to five discs, press **DISC CHANGE** to rotate the trays after placing two discs. Place the next disc on the empty tray. Each time **DISC CHANGE** is pressed, the trays rotate and one disc can be placed.

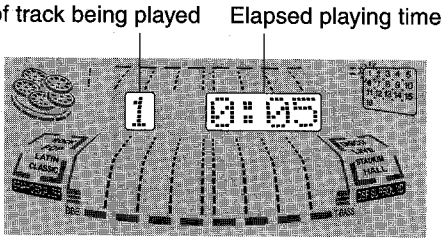
After placing the disc, press **≜ OPEN/CLOSE** to close the disc compartment.
The display shows the information of the disc to be played.



PLAYING DISCS

Load discs.

To play all discs in the disc compartment, press ◄►.
All discs are played once.



To play one disc only, press one of the DISC DIRECT PLAY 1-5.
The selected disc is played once.

To play with the remote control
Press **DISC DIRECT PLAY**, then press one of the numbered buttons **1-5** within 3 seconds to select a disc.

To stop play, press ■.
To pause play, press **II**. To resume play, press again.
To search for a particular point during playback, keep ◄◄ or ►► pressed and release it at the desired point.
To skip to the beginning of a track during playback, press ◄◄ or ►► repeatedly or turn **MULTI JOG**.
To remove discs, press **≜ OPEN/CLOSE**.
You can only remove the two discs that face you. When the disc to be removed does not face you, press **DISC CHANGE** repeatedly.

To start play when the power is off (Direct Play Function)
Press **CD**. The power is turned on and play of the loaded disc(s) begins.
When **≜ OPEN/CLOSE** is pressed, the power is also turned on and the disc compartment is opened.

To check the remaining time
During play (except random play or programmed play), press **CD EDIT/CHECK**. The amount of time remaining until all tracks finish playing is displayed. To restore the playing time display, press **CD EDIT/CHECK** again.

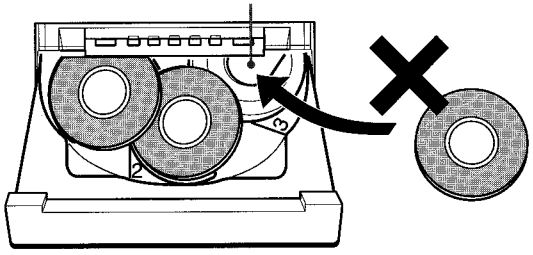
Selecting a track with the remote control
1 Press **DISC DIRECT PLAY**, then press one of the numbered buttons **1-5** within 3 seconds to select a disc.
2 Press numbered buttons **0-9** and **+10** to select a track.
Example:
To select the 25th track, press **+10**, **+10** and **5**.
To select the 10th track, press **+10** and **0**.
The selected track starts to play and play continues to the end of that disc.

Replacing discs during play
While one disc is playing, the other discs can be replaced without interrupting play.
1 Press **DISC CHANGE**.
Two discs can be replaced.
2 Remove the discs and replace with other discs.
To replace the other two discs, press **DISC CHANGE** again.
3 Press **≜ OPEN/CLOSE** to close the disc compartment.

NOTE

- While the disc compartment is opened with **DISC CHANGE**, do not press buttons other than **DISC CHANGE** or ▲ **OPEN/CLOSE**. Doing so may cause malfunctions. In this case, reset the unit referring "To reset" on page 24.
- When loading an 8-cm (3-inch) disc, make sure to put it onto the inner circle of the tray precisely. Otherwise, the disc may be damaged or the disc compartment will not open. If it does not open, please consult your Aiwa dealer for repair.
- Do not use irregular shape CDs (example: heart-shaped, octagonal ones). It may result in malfunctions.
- Do not place more than one compact disc on one disc tray.
- Do not tilt the unit with discs loaded. Doing so may cause malfunctions.
- When transporting the unit, remove the discs from the trays.
- When replacing the discs during play, do not replace discs other than those facing you.
  If you place a disc on the empty right inner tray, and then press ▲ **OPEN/CLOSE**, "ERROR" is displayed and the disc compartment may not close. Remove the disc on that tray.

Never place here.



RANDOM/REPEAT PLAY

Use the remote control.

RANDOM play

All the tracks on the selected disc or on all the discs can be played randomly.

REPEAT play

A single disc or all the discs can be played repeatedly.

Press RANDOM/REPEAT.

Each time it is pressed, the function can be selected cyclically.

RANDOM play — RANDOM lights up on the display.
REPEAT play — ↻ lights up on the display.
RANDOM/REPEAT play — RANDOM and ↻ light up on the display
Cancel — RANDOM and ↻ disappear from the display.

To play all discs, press ◄► to start play.
To play a single disc, press **DISC DIRECT PLAY**, then press one of the numbered buttons **1-5** within 3 seconds to start play.

NOTE

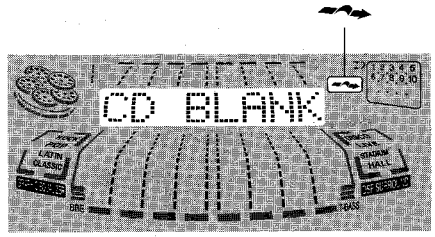
During random play it is not possible to skip to the previously played track with the ◄◄.

BLANK SKIP PLAY

The silent portions between tracks recorded on a CD can be skipped during playback.

1 Press CD BLANK SKIP.

"CD BLANK SKIP ON" is displayed and "⁓" will appear in the display.



2 Press ◄► to start playback.

The silent portions between tracks will be skipped, and the sound will be played back without interruption. If a track fades out (ends with the sound gradually decreasing), the fade-out portion will also be skipped.

To return to normal playback

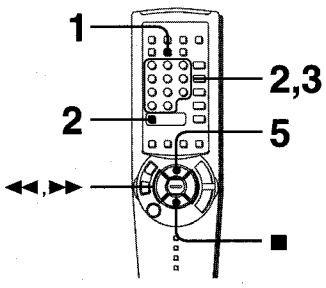
Press **CD BLANK SKIP** again so that "CD BLANK SKIP OFF" is displayed, and "⁓" in the display will disappear.

NOTE

- There may be a case where BLANK SKIP PLAY does not function correctly.
- BLANK SKIP PLAY is automatically canceled when performing AI EDIT RECORDING (page 17), PROGRAMMED EDIT RECORDING (page 18), or PROGRAMMED PLAY recording (page 11) or RANDOM PLAY recording (page 10).

PROGRAMMED PLAY

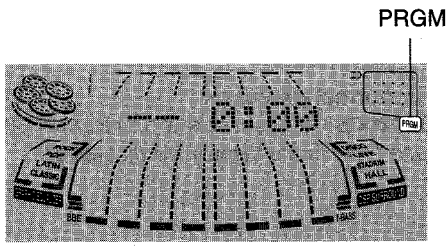
Up to 30 tracks can be programmed from any of the inserted disc.



Use the remote control.

1 Press PRGM twice in stop mode.

PRGM indicator lights up on the display.



- When **PRGM** is pressed once in step 1, the unit enters KARAOKE PROGRAM (page 20).

2 Press DISC DIRECT PLAY, then press one of the numbered buttons 1-5 within 3 seconds to select a disc.

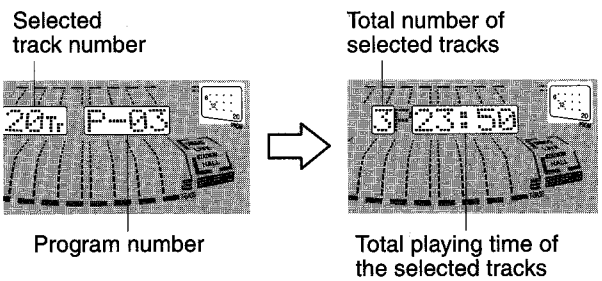
Go to the next step when the tray stops rotating.

3 Press the numbered buttons 0-9 and +10 to program a track.

Example:

To select the 25th track, press **+10**, **+10** and **5**.

To select the 10th track, press **+10** and **0**.



4 Repeat steps 2 and 3 to program other tracks.

5 Press ►/◄► to start play.

To check the program

Each time ◄◄ or ►► is pressed in stop mode, a disc number, track number, and program number will be displayed.

To clear the program

Press ■ **CLEAR** in stop mode.

To add tracks to the program

Repeat steps 2 and 3 in stop mode. The track will be programmed after the last track.

To change the programmed tracks

Clear the program and repeat all the steps again.

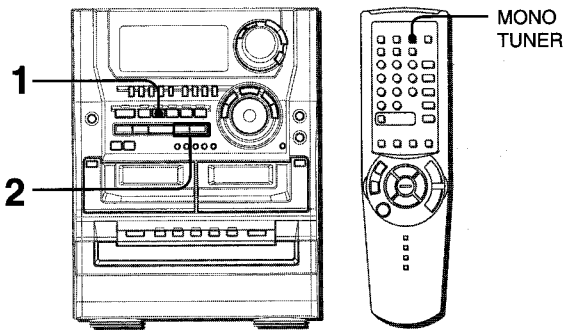
To play the programmed tracks repeatedly

After programming the tracks, press **RANDOM/REPEAT** repeatedly until ↻ appears on the display.

NOTE

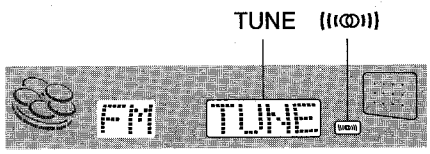
- During programmed play, you cannot perform random play, check the remaining time, and select a disc or track. "Can't USE" is displayed if you attempt to select a track.
- "FULL" is displayed if you attempt to program more than 30 tracks.

MANUAL TUNING



1 Press TUNER/BAND repeatedly to select the desired band, FM or AM.
When **TUNER/BAND** is pressed while the power is off, the power is turned on directly.

2 Press ◄◄ DOWN or ►► UP to select a station.
Each time the button is pressed, the frequency changes.
When a station is received, "TUNE" is displayed for 2 seconds.
During FM stereo reception, ((◎)) is displayed.



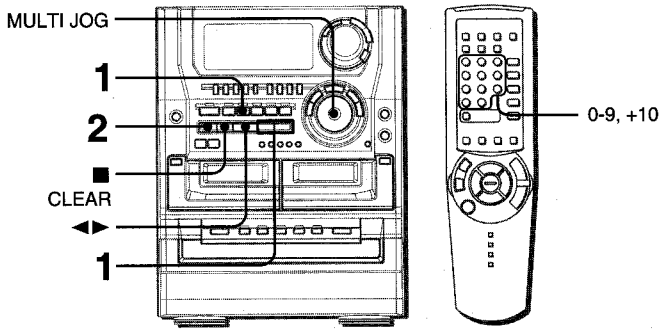
To search for a station quickly (Auto Search)
Keep ◄◄ **DOWN** or ►► **UP** pressed until the frequency starts to change rapidly. After tuning in to a station, the search stops. To stop the Auto Search manually, press ◄◄ **DOWN** or ►► **UP**.
- The Auto Search may not stop at stations with very weak signals.

When an FM stereo broadcast contains noise
Press **MONO TUNER** on the remote control so that "MONO" appears on the display.
Noise is reduced, although reception is monaural.
To restore stereo reception, press the button again so that MONO disappears.

To change the AM tuning interval
The default setting of the AM tuning interval is 10 kHz/step. If you use this unit in an area where the frequency allocation system is 9 kHz/step, change the tuning interval.
Press **POWER** while pressing **TUNER/BAND**.
To reset the interval, repeat this procedure.

NOTE
When the AM tuning interval is changed, all preset stations are cleared. The preset stations have to be set again.

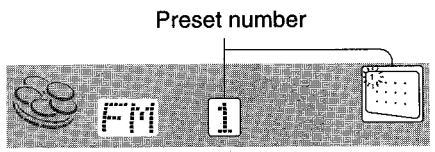
PRESETTING STATIONS



The unit can store a total of 32 preset stations. When a station is stored, a preset number is assigned to the station. Use the preset number to tune in to a preset station directly.

1 Press the TUNER/BAND to select a band, and press ◄◄ DOWN or ►► UP to select a station.

2 Press ▮▮ SET to store the station.
A station is assigned a preset number, beginning from 1 in consecutive order for each band.



3 Repeat steps 1 and 2.
The next station will not be stored if a total of 32 preset stations for all the bands have already been stored.

NOTE
"FULL" is displayed if you attempt to store more than 32 preset stations.

PRESET NUMBER TUNING

Use the remote control to select the preset number directly.

1 Press TUNER/BAND to select a band.

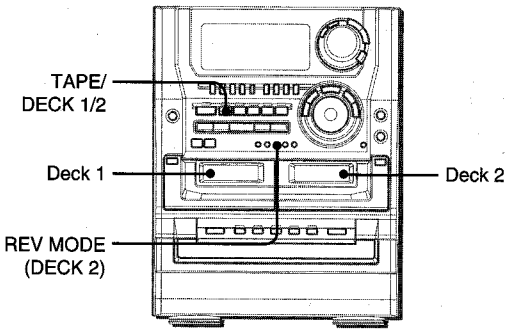
2 Press numbered buttons 0-9 and +10 to select a preset number.
Example:
To select preset number 15, press **+10** and **5** .
To select preset number 20, press **+10**, **+10** and **0**.

Selecting a preset number on the main unit
Press **TUNER/BAND** to select a band. Then, press ◄► repeatedly or turn **MULTI JOG**.
Each time ◄► is pressed, the next higher number is selected.

To clear a preset station
Select the preset number of the station to be cleared. Then, press ■ **CLEAR**, and press ▮▮ **SET** within 4 seconds.
The preset numbers of all other stations in the band with higher numbers are also decreased by one.

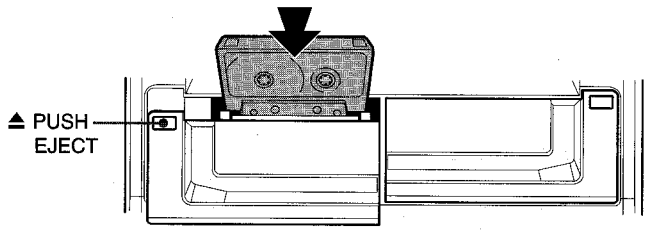
BASIC OPERATIONS

INSERTING TAPES



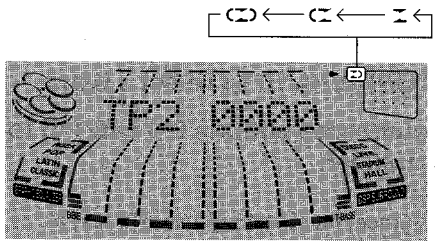
- On deck 1, tapes are always played back on both sides. On deck 2, you can select a reverse mode to play back one or both sides.
- Use Type I (normal), Type II (high/CrO_2) or Type IV (metal) tapes for playback.

Press TAPE/DECK 1/2, then press ⏏ PUSH EJECT to open the cassette holder.



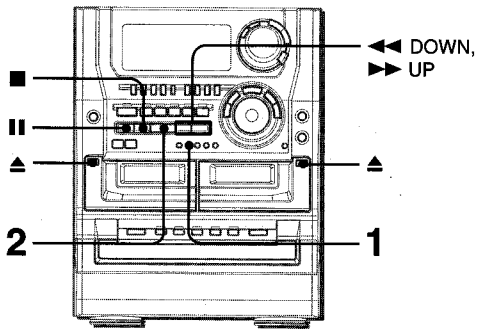
Insert a tape with the exposed side down. Push the cassette holder to close.

To select a reverse mode (deck 2 only)
Each time **REV MODE (DECK 2)** is pressed, the reverse mode changes.



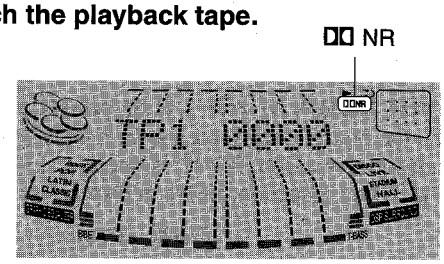
To play one side only, select ⇄.
To play from front side to reverse side once only, select ⇉.
To play both sides repeatedly, select ⟲.
- When tapes are loaded in both decks, ⇉ on the display indicates Continuous Play.

PLAYING BACK A TAPE



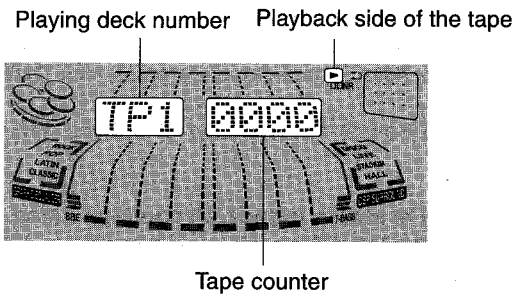
Insert a tape.

***1* Press DOLBY NR to turn Dolby NR on or off to match the playback tape.**



For tapes recorded with DOLBY NR, turn on DD NR.
For tapes recorded without DOLBY NR, turn off DD NR.

***2* Press ◀▶ to start play.**



▶: The front side is being played (forward).
◀: The back side is being played (reverse).

When tapes are loaded in both decks
Press **TAPE/DECK 1/2** first to select a deck.
The selected deck number is displayed.

To stop play, press ■.
To pause play (deck 2 only), press II. To resume play, press again.
To change the playback side, press ◀▶ in play or pause mode.
To fast forward or rewind, press ◀◀ or ▶▶ in stop mode. Then press ■ to stop the tape.

To start play when the power is off (Direct Play Function)
Press **TAPE/DECK 1/2.** The power is turned on and play of the inserted tape begins.

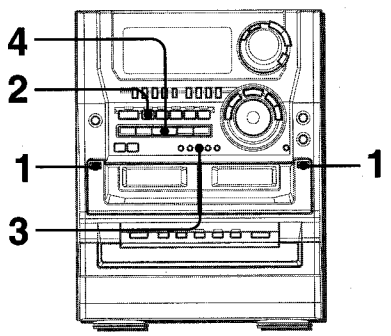
To set the tape counter to 0000
Press ■ **CLEAR** in stop mode.
The counter is also set to 0000 when the cassette holder is opened.

MUSIC SENSOR

If there is a 4-second or longer blank between each track, a search for the beginning of the current or next track during playback can be done easily.
When ► of ◄► button is flashing, press ►► to move to the next track or ◄◄ to move to the beginning of the current track.
When ◄ of ◄► button is flashing, press ◄◄ to move to the next track, or ►► to move to the beginning of the current track.

The search function may not be able to detect tracks under the following conditions:
- Blanks of less than 4 seconds between tracks
- Noisy blanks
- Long passages of low-end sound
- Low overall recording levels

CONTINUOUS PLAY



After playback on one deck finishes, the tape in the other deck will start to play without interruption.

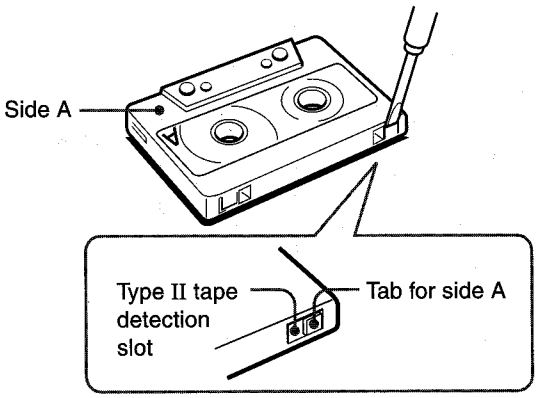
1 **Insert tapes into deck 1 and deck 2.**

2 **Press TAPE/DECK1/2 to select the deck to be played back first.**

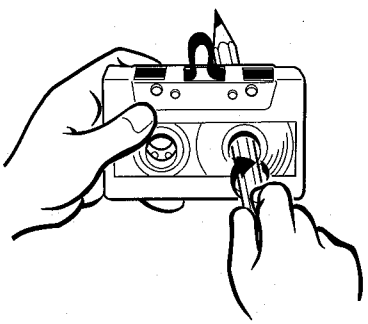
3 **Press REV MODE (DECK 2) to select ⇄.**

4 **Press ◄► to start playback.**
Playback continues until ■ is pressed.

About cassette tapes
- **To prevent accidental erasure,** break off the plastic tabs on the cassette tape after recording with a screwdriver or other pointed tool.



To record on the tape again, cover the tab openings with adhesive tape, etc. (On Type II tapes, take care not to cover the Type II tape detection slot.)
- **120-minute or longer tapes** are extremely thin and easily deformed or damaged. They are not recommended.
- **Take up any slack in** the tape with a pencil or similar tool before use. Slack tape may break or jam in the mechanism.

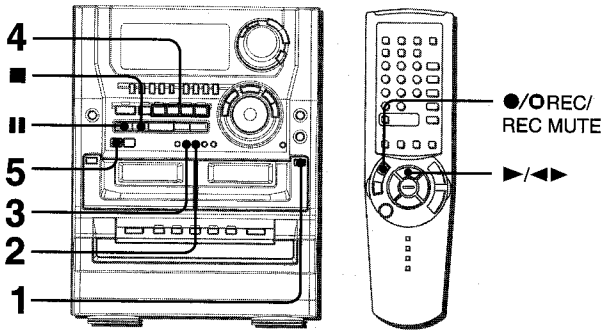


DOLBY NR system
The Dolby Noise Reduction system reduces tape hiss noise. For optimum performance when playing back a tape recorded with the DOLBY NR system, turn on the DOLBY NR system.

En

BASIC RECORDING

This section explains how to record from the tuner, CD player, or external equipment.

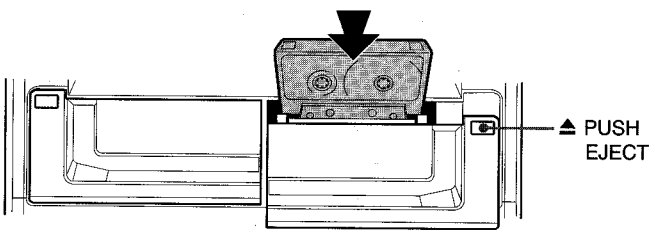


Preparation

- Set the tape to the point where recording will start.
- Use Type I (normal) and Type II (high/CrO_2) tapes for recording.

1 Insert the tape to be recorded on into deck 2.

Insert the tape with the side to be recorded on first facing out from the unit.



2 Press REV MODE (DECK 2) to select the reverse mode.

To record on one side only, select ⇄.
To record on both sides, select ⇄ or (⇄).

3 Press DOLBY NR to turn Dolby NR on or off.

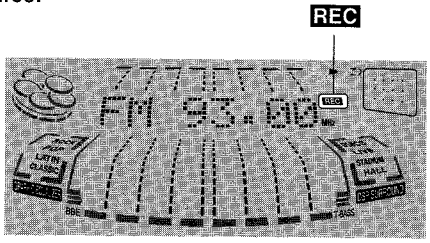
To record with DOLBY NR, turn on DD NR.
To record without DOLBY NR, turn off DD NR.

4 Press function (CD, TUNER/BAND, VIDEO/AUX or MD) and prepare the source to be recorded.

To record from a CD, press **CD** and load the disc(s).
To record from a radio broadcast, press **TUNER/BAND** and tune in to a station.
To record from a connected source, press **VIDEO/AUX** or **MD**.

5 Press ● REC/REC MUTE to start recording.

When recording from a connected source, start playback of the source.



When the selected function is CD, playback and recording start simultaneously.

To stop recording, press ■.
To pause recording, press II. (Applicable when the source is TUNER/BAND, VIDEO/AUX or MD.) To resume recording, press again.

To start recording with the remote control
First press **●/O REC/REC MUTE**, and then press ►/◄► within 2 seconds.

SOUND ADJUSTMENT DURING RECORDING

The output volume of the speakers or headphones may be freely varied without affecting the level of the recording. But BBE will affect the recording.

Recording with BBE
The desired source can be recorded with the BBE function to enhance the clarity of high-frequency sound. When playing back a tape recorded with BBE, it is recommended that BBE be set to off.

INSERTING BLANK SPACES

Insertion of 4-second blank spaces enables you to activate the Music Sensor function. (Applicable when the source is TUNER, VIDEO/AUX or MD.)

1 **Press ● REC/REC MUTE during recording or while in recording pause mode.**
REC on the display flashes for 4 seconds and the tape runs without recording. After 4 seconds, the deck enters the recording pause mode.
2 **Press II to resume recording.**

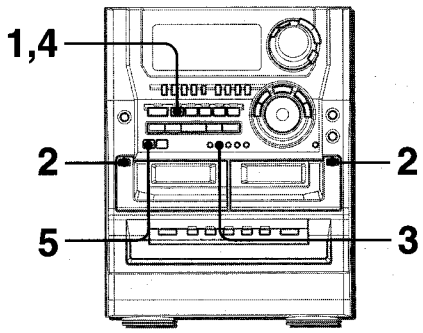
To insert a blank space of less than 4 seconds, press ● **REC/REC MUTE** again while REC is flashing.
To insert blank spaces of more than 4 seconds, after the deck enters recording pause mode, press ● **REC/REC MUTE** again. Each time the button is pressed, a 4-second blank space is added.

NOTE
"Can't REC" is displayed if you attempt to record on a tape with the plastic tabs broken off.

To erase a recording
Make sure the microphone(s) is(are) not connected to this unit and set the microphone volume and the echo level to OFF (page 19).

1 Insert the tape to be erased into deck 2 and press **TAPE/ DECK 1/2** to display "TP 2".
2 Set the tape to the point where the erasure is to be started.
3 Set the reverse mode by pressing **REV MODE (DECK 2)**.
4 Press ● **REC/REC MUTE** to start the erasure.

DUBBING A TAPE MANUALLY



Preparation
- Set the tape to the point where recording will start.
- The reverse mode is automatically set to ⇄. Note that recording will be done on one side of the tape only.

1 **Press TAPE/DECK 1/2.**

2 **Insert the original tape into deck 1 and the tape to be recorded on into deck 2.**
Insert the tapes with the sides to be played back or recorded on facing out from the unit.

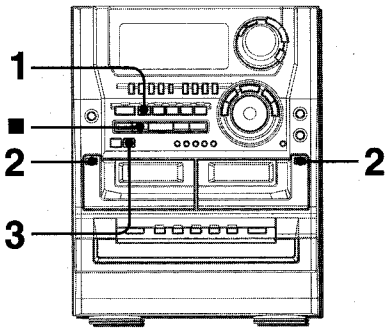
3 **Press DOLBY NR to turn off the Dolby NR.**
DD NR on the display goes out.

4 **Press TAPE/DECK 1/2 to select deck 1.**
"TP1" is displayed.

5 **Press ● REC/REC MUTE to start recording.**
Playing and recording start simultaneously.

To stop dubbing
Press ■.

DUBBING THE WHOLE TAPE



This function allows you to make exact copies of both sides of the original tape. The reverse side of both tapes will start simultaneously as soon as the longer tape has been reversed.

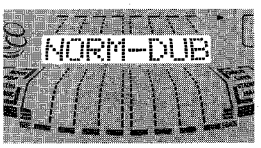
NOTE
- Dubbing does not start from a point halfway in the tape.
- The reverse mode is automatically set to ⇉.
- The Dolby NR does not affect recording.

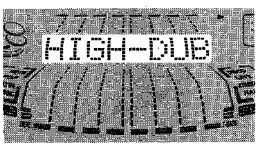
1 **Press TAPE/DECK 1/2.**

2 **Insert the original tape into deck 1 and the tape to be recorded on into deck 2.**
Insert each tape with the side to be played back or recorded on first facing out from the unit.

3 **Press SYNC DUB once or twice to start recording.**
① **For recording at normal speed,** press it once to display "NORM-DUB".
② **For recording at high speed,** press it twice to display "HIGH-DUB".

① ②



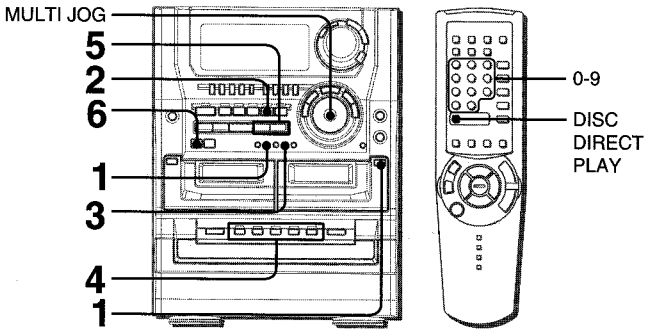


The tapes are rewound to the beginning of the front sides, and recording starts.

To stop dubbing
Press ■.

NOTE
- Recording does not start, if the erasure prevention tab on either side of the tape is broken off.
- If the leader segment of the tape to be recorded on is longer than that of the original tape, recording on the reverse side may stop midway through the recording. In this case, dub each side manually following the procedure in "DUBBING A TAPE MANUALLY".

AI EDIT RECORDING



The AI edit recording enables CD recording without worrying about tape length and track length. When a CD is inserted, the unit automatically calculates the total track length. If necessary, the order of tracks is rearranged so that no track is cut short.
(AI: Artificial Intelligence)

NOTE

AI edit recording will not start from a point halfway into the tape. The tape must be recorded from the beginning of either side.

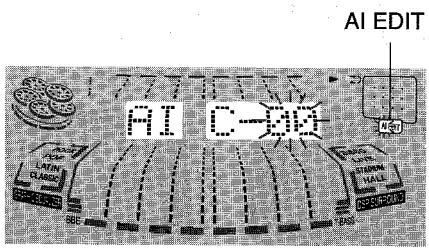
***1* Insert the tape into deck 2, and press DOLBY NR to turn Dolby NR on or off.**

Insert the tape with the side to be recorded on first facing out from the unit.

***2* Press CD and load the disc(s).**

***3* Press CD EDIT/CHECK once.**

"EDIT" lights up and "AI" flashes on the display.



When "PRGM" is displayed, press **CD EDIT/CHECK** again.

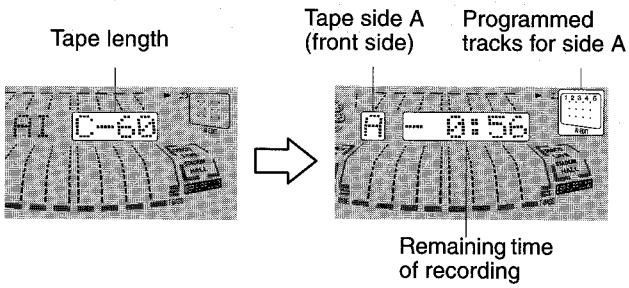
***4* Press one of the DISC DIRECT PLAY 1-5 to select a disc.**

***5* Press ◀◀ or ▶▶ to designate the tape length.**

10 to 99 minutes can be specified.
In a few seconds, the tracks to be recorded on each side of the tape are determined.

- The numbered buttons **0-9** or **MULTI JOG** are also available to designate the tape length.

Example: When using a 60-minute tape, press **6** and **0**.



***6* Press ● REC/REC MUTE to start recording.**

The tape is rewound to the beginning of the front side, the lead segment is played through for 10 seconds, and recording starts. When recording on the front (side A) ends, recording on the back (side B) starts.

To stop recording

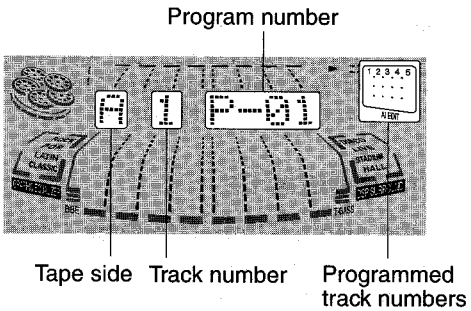
Press ■. Recording and CD play stop simultaneously.

To clear the edit program

Press ■ **CLEAR** twice so that "EDIT" disappears on the display.

To check the order of the programmed track numbers

Before recording, press **CD EDIT/CHECK** to select side A or B, and press ◀◀ or ▶▶ repeatedly or turn **MULTI JOG**.



To add tracks from other discs to the edit program

If there is any time remaining on the tape after step 5, you can add tracks from other discs in the CD compartment .

1 Press **CD EDIT/CHECK** to select side A or B.
2 Press one of the **DISC DIRECT PLAY 1-5**, to select a disc.
3 Press the numbered buttons on the remote control to select tracks.
A track which has a playing time longer than the remaining time cannot be programmed.
4 Repeat steps 2 and 3 to add more tracks.

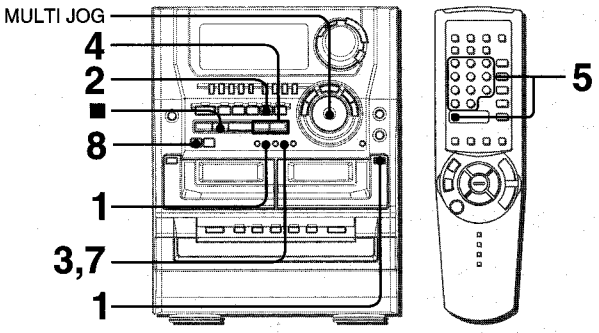
Time on cassette tapes and editing time

The actual cassette recording time is usually a little longer than the specified recording time printed on the label. This unit can program tracks to use the extra time. When the total recording time is a little longer than the tape's specified recording time after editing, the display shows the extra time (without a minus mark), instead of the time remaining on the tape (with the minus mark).

NOTE

- Recording is inhibited if the erasure prevention tab on either side of the tape is broken off.
- The AI edit recording function cannot be used with discs containing 31 tracks or more. "TR OVER" is displayed if this is attempted.

PROGRAMMED EDIT RECORDING



In the programmed edit recording function the tracks can be programmed while checking the remaining time on each side of the tape.

NOTE

The programmed edit recording will not start from a point halfway in the tape. The tape must be recorded from the beginning of either side.

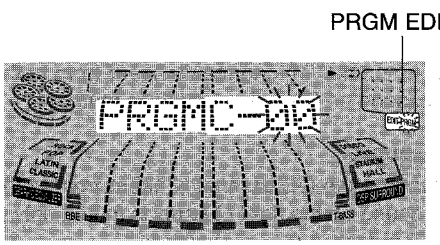
1 **Insert the tape into deck 2, and press DOLBY NR to turn Dolby NR on or off.**

Insert the tape with the side to be recorded on first facing out from the unit.

2 **Press CD and load the disc(s).**

3 **Press CD EDIT/CHECK twice.**

"EDIT" lights up and "PRGM" flashes on the display.

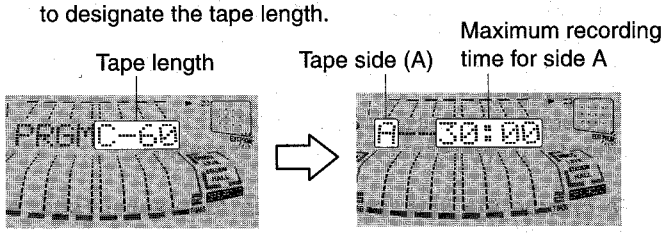


When "AI" is displayed, press **CD EDIT/CHECK** again.

4 **Press ◄◄ or ►► to designate the tape length.**

10 to 99 minutes can be specified.

- The numbered buttons **0-9** or **MULTI JOG** are also available to designate the tape length.

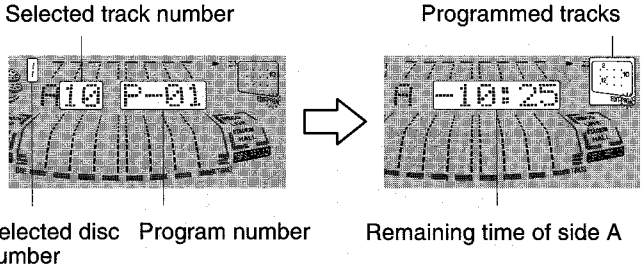


5 **Press DISC DIRECT PLAY, then press numbered buttons 1-5 within 3 seconds on the remote control to select a disc. Then press numbered buttons 0-9 and +10 to program a track.**

Example: To select the 10th track of disc 2, press **DISC DIRECT PLAY** and **2**, then press **+10** and **0**.

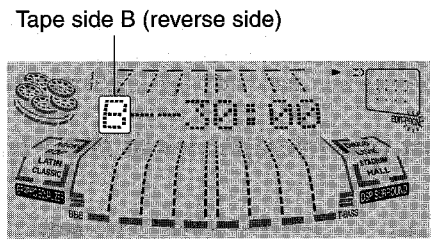
6 **Repeat step 5 for the rest of the tracks for side A.**

A track whose playing time is longer than the remaining time cannot be programmed.



7 **Press CD EDIT/CHECK to select side B and program the tracks for side B.**

After confirming B on the display, repeat step 5.



8 **Press ● REC/REC MUTE to start recording.**

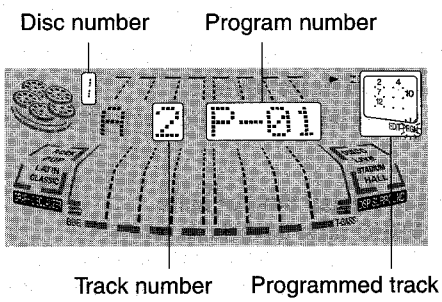
The tape is rewound to the beginning of the front side, the lead segment is played through for 10 seconds, and recording starts. When recording on the front side (A) ends, recording on the back side (B) starts.

To stop recording

Press ■. Recording and CD play stop simultaneously.

To check the order of the programmed track numbers

Before recording, press **CD EDIT/CHECK** to select side A or B, and press ◄◄ or ►► repeatedly or turn **MULTI JOG**.



To change the program of each side

Press **CD EDIT/CHECK** to select side A or B, and press ■ **CLEAR** to clear the program of the selected side. Then program tracks again.

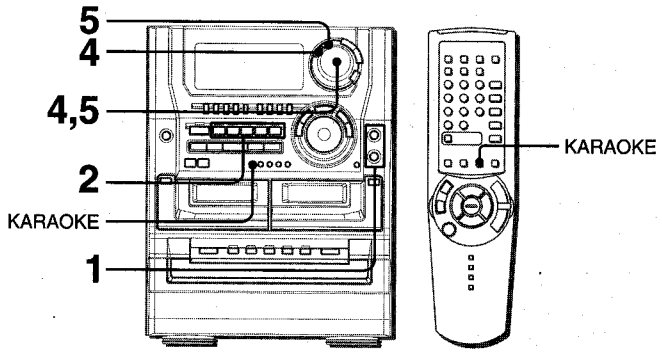
To clear the edit program

Press ■ twice so that "EDIT" disappears on the display.

NOTE

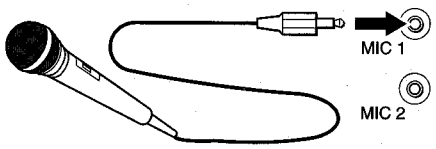
- Recording is inhibited if the erasure prevention tab on either side of the tape is broken off.
- Up to 30 tracks can be programmed from any of the inserted discs.
- "FULL" is displayed if you attempt to program more than 30 tracks.

MICROPHONE MIXING



Two microphones (not supplied) can be connected to this unit, allowing you to sing along to music sources.
Use microphones with standard plugs (ø6.3 mm, 1/4 inch).

1 Connect your microphones to MIC 1 and MIC 2 jacks.



2 Press one of the function buttons to select the source to be mixed, and play the source.

3 Adjust the volume and tone of the source.

4 Press MIC and turn VOLUME within 4 seconds to adjust the microphone volume.

The microphone volume can be selected from 1 to MAX (7) or OFF (cancel).
The volume of both microphones is adjusted simultaneously.

5 Press ECHO and turn VOLUME within 4 seconds to adjust the echo level.

The echo level can be selected from 1 to MAX (7) or OFF (cancel).

To change the delay time of echo
Hold down **ECHO** while the echo is on.
"ECHO-L" (Long) and "ECHO-M" (Medium) are displayed alternately. At the desired position, release the button.

To record microphone sound mixed with source sound
Follow the procedure for recording from the sound source (see page 15).
SYNC DUB cannot be used for mixing recording.

When not using the microphones
Set the microphone volume and echo level to OFF and remove the microphones from **MIC** jacks.

NOTE

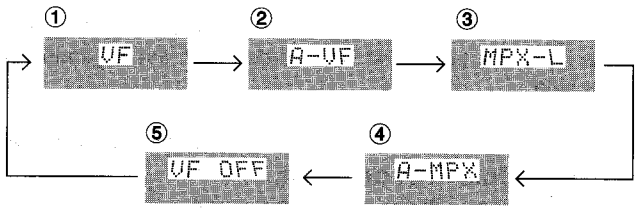
- MIC and ECHO are reset to OFF automatically when the function is changed, one of the DSP SURROUND buttons is pressed, the power is turned off, or the AC cord is disconnected.
- When the MIC or ECHO level is changed, the DSP SURROUND mode is automatically canceled.
- If a microphone is held too near the speakers, a howling sound may be produced. In this case, hold the microphone away from the speakers, or decrease the microphone volume.
- If sound through the microphone is extremely loud, it may be distorted. In this case, decrease the microphone volume.

Recommended microphones
The use of unidirectional type microphones is recommended to prevent howling. Contact your local Aiwa dealer for details.

VOCAL FADER/MULTIPLEX FUNCTIONS

This unit can use discs or tapes as Karaoke sources.
Use the vocal fader function for ordinary discs or tapes.
Use the multiplex function for multi audio discs or tapes.

Press KARAOKE repeatedly to select the vocal fader or multiplex function.
Each time **KARAOKE** is pressed, one of these functions is selected cyclically.



① Vocal Fader
The singer's voice becomes softer than the accompaniment.

② Auto Vocal Fader
The singer's voice becomes softer only while there is audio input through microphones.

③ Multiplex
The sound on the left channel is heard from both speakers, and the sound on the right channel is muted.

④ Auto Multiplex
The sound on the left channel is heard from both speakers, and the sound on the right channel is muted only while there is audio input through a microphone.

⑤ Cancel

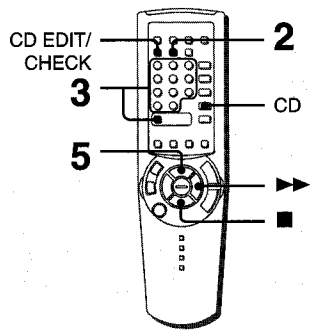
To change the audible channel in Multiplex function
When Multiplex is selected, "MPX-L" is displayed for 3 seconds and changes to the selected function name. After the selected function name is displayed, keep pressing **KARAOKE** until "MPX-R" is displayed.
To return to the initial setting, select MPX-L.
When the power is turned off, MPX-L is restored.

To change the time lag setting in Auto Vocal Fader or Auto Multiplex function
The muted singer's voice can be restored faster.
When Auto Vocal Fader or Auto Multiplex is selected, "A-VF" or "A-MPX" is displayed for 3 seconds and changes to the selected function name. After the selected function name is displayed, keep pressing **KARAOKE** until "FAST" is displayed.
To return to the initial setting, select SLOW.
When the power is turned off, SLOW is restored.

NOTE

- The Karaoke functions may not operate correctly with the following kinds of CDs or tapes.
  - Those with monaural sound
  - Those recorded with strong echoes
  - Those with the vocal part recorded on the right or left side of the sound width
- While the Karaoke function is on, the sound is output as monaural.
- When the function is changed, Karaoke function is canceled.

KARAOKE PROGRAM

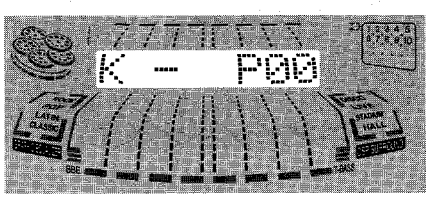


Before or during CD play, you can reserve up to 15 tracks to be played after the current track. Each reservation is cleared when it finishes playing.

Use the remote control.

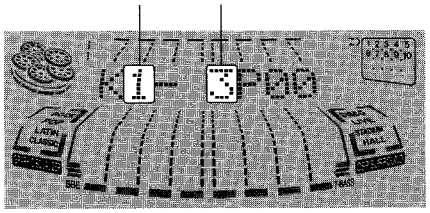
1 **Press CD and load the discs.**

2 **Press PRGM <u>once</u>.**



3 **Press DISC DIRECT PLAY button, then press one of the numbered buttons 1-5 <u>within 3 seconds</u> to select a disc. Then press the numbered buttons 0-9 and +10 to program a track.**

Reserved disc number Reserved track number

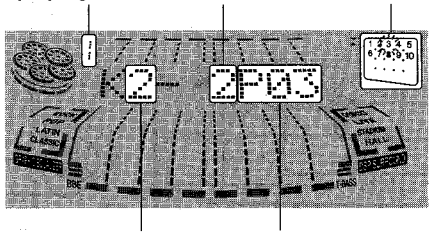


4 **Repeat step 3 to reserve other tracks.**

5 **Press ►/◄► to start play.**

After a track is played, it is cleared from the program.

Currently playing disc Track number of the last reservation Currently playing track number flashes



Disc number of the last reservation Number of remaining reserved tracks

To add a reservation during play

Repeat step 3.

To check the reserved tracks

Press **CD EDIT/CHECK** repeatedly. Each time it is pressed, the disc number and track number are displayed in the reserved order.

To stop play

Press ■.

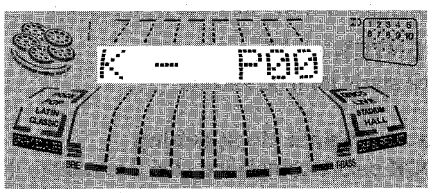
When ◄► is pressed, the play starts from the last track again.

To skip a current track

Press ►►. The skipped track is cleared from the program.

To clear all the reservations

Press ►► repeatedly until "K - P00" is displayed.



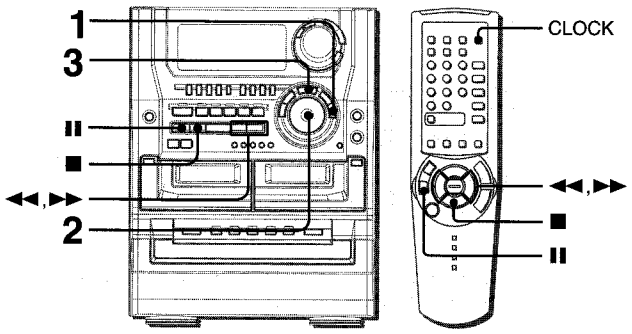
Press it once more to cancel the Karaoke program. The display returns to that of CD play.

NOTE

- If the reserved track number does not exist on the selected disc, the unit stops playing and the display flashes.
  In this case, press ►► to skip the error track. Then press ◄► to start play with the next reserved track.
- When **PRGM** is pressed repeatedly in step 2, PRGM is displayed and the unit enters CD programmed play mode (page 11).
  To cancel programmed play, press ■ **CLEAR**.

En

SETTING THE CLOCK



The clock is displayed. (The ":" between the hours and minutes flashes.) When the power cord is plugged into an AC outlet for the first time after purchase or when the clock setting is canceled due to a power failure, the entire clock display flashes.

1 Press CLOCK.

2 Within 4 seconds, turn MULTI JOG to designate the hour and the minute.

Turning **MULTI JOG** changes both the hour and the minute. ◀◀ or ▶▶ is also available instead of **MULTI JOG**. Holding these buttons down will vary the time rapidly.

3 Press ENTER or II.

The clock starts from 00 second.

To restore an original clock setting

Press **CLOCK** before completing step 3 to restore the previous time setting. This cancels any new setting.

To view the clock when another display is in the display

Press **CLOCK**. The time is displayed for 4 seconds and then the original display reappears. However, the clock cannot be displayed during recording.

To switch to the 24-hour standard

Press **CLOCK** and then press ■ within 4 seconds.
Repeat the same procedure to restore the 12-hour standard.
In the 12-hour standard, "AM 12:00" indicates midnight and "PM 12:00" indicates noon.

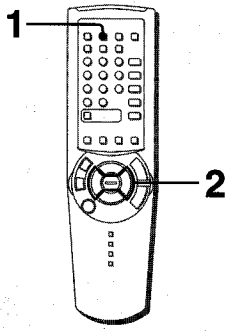
If the clock display flashes

This caused by a power interruption. The current time needs to be reset.
If power is interrupted for more than approximately 24 hours, all settings stored in memory after purchase need to be reset.

NOTE

If the power-economizing mode (page 6) is on, the unit blacks out when the power is turned off. To view the clock, press **CLOCK** so that the time is displayed for 4 seconds.

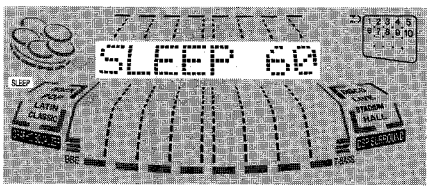
SETTING THE SLEEP TIMER



The unit can be turned off automatically at a specified time.

Use the remote control.

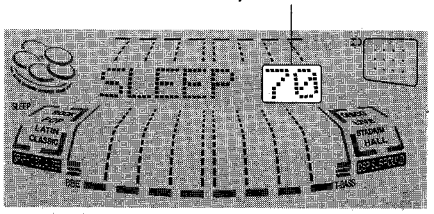
1 Press SLEEP.



2 Within 4 seconds, press ◀◀ or ▶▶ to specify the time until the power is turned off.

Each time the button is pressed, the time changes between 5 and 240 minutes in 5-minute steps.
MULTI JOG is also available instead of ◀◀ and ▶▶.

Specified time



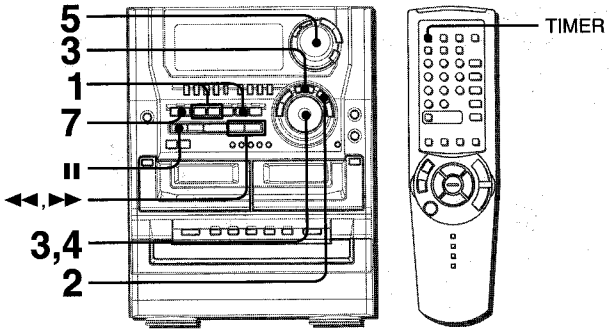
To check the time remaining until the power is turned off

Press **SLEEP** once. The remaining time is displayed for 4 seconds.

To cancel the sleep timer

Press **SLEEP** twice so that "SLEEP oFF" appears on the display.

SETTING THE TIMER

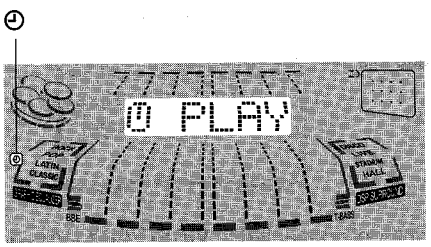


The unit can be turned on at a specified time every day with the built-in timer.

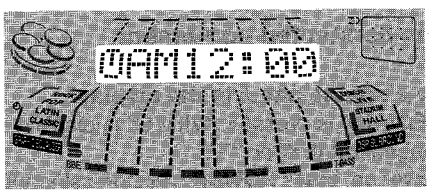
Preparation
Make sure the clock is set correctly.

***1* Press one of the function buttons to select a source.**
- If **TUNER/BAND** is pressed, the band cannot be selected in this step.

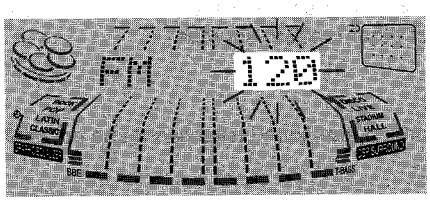
***2* Press TIMER repeatedly until ⏲ appears on the display.**
Time and audio source name flash alternatively.



***3* Within 6 seconds, turn MULTI JOG to designate the timer-on time, then press ENTER or II.**
Turning **MULTI JOG** changes both the hour and the minute. ◄◄ or ►► is also available instead of **MULTI JOG**. Holding these buttons down will vary the time rapidly.



***4* Within 4 seconds, turn MULTI JOG to select the duration for the timer-activated period.**
The duration can be set between 5 and 240 minutes in 5-minute steps.
◄◄ or ►► is also available instead of **MULTI JOG**.



The duration will be automatically set after 4 seconds. It will also be set if **ENTER** or **II** is pressed within 4 seconds after step 4.

***5* Adjust the volume.**
The source sound will play at the volume level set in this step when the power is turned on by the timer.
If the volume level is set to 21 or higher, however, it will automatically be set to 20 when the power is turned on.

***6* Prepare the source.**
To listen to a CD, load the disc to be played first on tray 1.
To listen to a tape, insert the tape into deck 1 or 2.
To listen to the radio, tune in to a station.

***7* Press POWER to turn off the power.**
When the timer-on time is reached, the unit turns on and begins play with the selected source.

NOTE
You can change the source that was selected in step 1 by pressing one of the function buttons before pressing **ENTER** or **II** in step 3.

To check the timer setting
Press **TIMER**.
The selected source, the timer-on time, and the duration for the timer-activated period will be displayed for 6 seconds.

To change any of the previous setting
Carry out from step 1.
However, if you do not change the timer-on time, in step 3 just press **ENTER** twice and continue from step 4.

To cancel timer standby mode temporarily
Press **TIMER** repeatedly so that ⏲ disappears.
To restore the timer standby mode, press again to display ⏲.

Using the unit while the timer is set
You can use the unit normally after setting the timer.
Before turning off the power, carry out step 5 and 6.

NOTE
- Timer playback and timer recording will not begin unless the power is turned off.
- Connected equipment cannot be turned on and off by the built-in timer of this unit. Use an external timer.

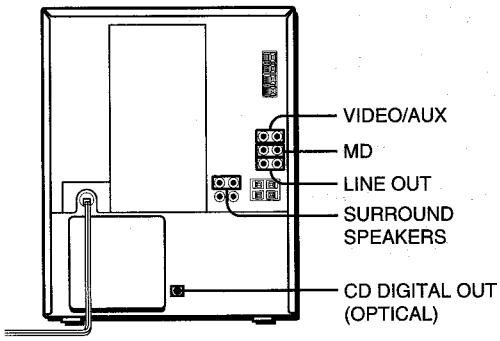
TIMER RECORDING

Timer recording is applicable for TUNER and VIDEO/AUX (with an external timer) sources only.

Press either **TUNER/BAND** or **VIDEO/AUX** to select a source, then **press TIMER repeatedly until ⏲ REC appears on the display.**
Within 6 seconds, carry out the steps of "SETTING THE TIMER" from step 3 and insert the tape to be recorded into deck 2 after step 6.

NOTE
- If the timer recording is done with the economizing mode (page 6) set to "ECO ON" or "ECO AUTO" and the power turns off, the dimmer mode will be set to dimmest and the volume level will be 0 (minimum level) the next time the power is turned on.
- You cannot use the timer function to record from a CD, tape or MD.

CONNECTING OPTIONAL EQUIPMENT



Refer to the operating instructions of the connected equipment for details.

- The connecting cords are not supplied. Obtain the necessary connecting cords.
- Consult your local Aiwa dealer for optional equipment.

VIDEO/AUX JACKS

This unit can input analog sound signals through these jacks. Use a cable with RCA phono plugs to connect audio equipment (turntables, LD players, VCRs, TV, MD players etc.).
Connect the red plug to **R** jack, and the white plug to **L** jack.

When connecting a turntable
Use an Aiwa turntable equipped with a built-in equalizer amplifier.

MD JACKS

This jack is recommended to connect with an MD player.
Use a cable with RCA phono plugs.
Connect the red plug to the **MD R** jack, and the white plug to the **MD L** jack.

- When MD player is connected to these jacks, no sound will be output from the **LINE OUT** jacks.

LINE OUT JACKS

This unit can output analog sound signal through these jacks. Use a cable with RCA phono plugs to connect audio equipment with **LINE IN** (analog input) jacks.
Connect the red plug to **LINE OUT R** jack and the white plug to **LINE OUT L** jack.

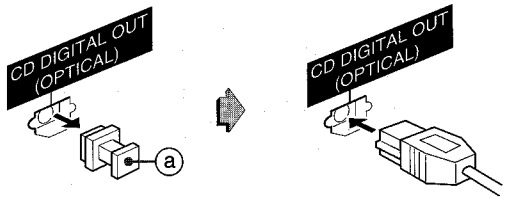
NOTE
Do not connect an equipment to **LINE OUT** and **VIDEO/AUX** simultaneously. Otherwise, noise is generated and malfunction occurs.

SURROUND SPEAKERS JACKS

Connect the optional surround speakers with the 8 ohms to 16 ohms impedance to the jacks.

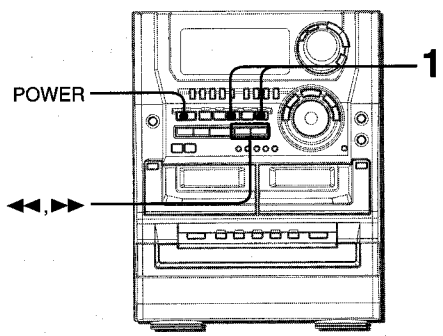
CD DIGITAL OUT (OPTICAL) JACK

This unit can output CD digital sound signals through this jack. Use an optical cable to connect digital audio equipment (DAT deck, MD recorder, etc.).
Remove the dust cap ⓐ from the **CD DIGITAL OUT (OPTICAL)** jack. Then, connect an optical cable plug to the **CD DIGITAL OUT (OPTICAL)** jack.



When the CD DIGITAL OUT (OPTICAL) jack is not being used
Attach the supplied dust cap.

LISTENING TO EXTERNAL SOURCES



To play equipment connected to **VIDEO/AUX** jacks or **MD** jacks, proceed as follows.

1 Press VIDEO/AUX or MD.

To play the equipment connected to VIDEO/AUX, press **VIDEO/AUX**. "VIDEO" appears on the display.
To play the equipment connected to MD, press **MD**. "MD" appears on the display.

2 Play the connected equipment.

To change a source name in the display
When **VIDEO/AUX** is pressed, "VIDEO" is displayed initially. It can be changed to "AUX" or "TV".
With the power on, press **POWER** while pressing **VIDEO/AUX**. Repeat the procedure to select one of the names.

To adjust the sound level of the external source
When the sound level of the external source is much higher or much lower than that of other function sources, adjust it as follows.

1 Press **VIDEO/AUX** or **MD** and play the equipment.
2 Press ◀◀ or ▶▶ so that the sound level becomes the same as that of other function sources.

NOTE
During recording, the sound level cannot be adjusted.

CARE AND MAINTENANCE

Occasional care and maintenance of the unit and the software are needed to optimize the performance of your unit.

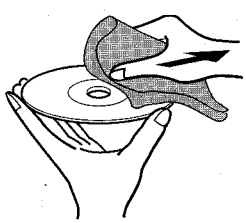
To clean the cabinet
Use a soft and dry cloth.
If the surfaces are extremely dirty, use a soft cloth lightly moistened with mild detergent solution. Do not use strong solvents, such as alcohol, benzine or thinner as these could damage the finish of the unit.

To clean the tape heads
When the tape heads are dirty;
- high frequency sounds is not emitted
- the sound is not adequately high
- the sound is off-balance
- the tape cannot be erased
- the tape cannot be recorded on

After every 10 hours of use, clean tape heads with a head cleaning cassette.
Use separately sold dry-type or wet-type cleaning cassette.
Refer to the instructions of the cleaning cassette for details.

To demagnetize the tape heads
The tape heads may become magnetized after long-term use. This may narrow the output range of recorded tapes and increase noise.
After every 20 to 30 hours of use, demagnetize the tape heads with a separately sold demagnetizing cassette.
Refer to the instructions of the demagnetizing cassette for details.

Care of discs
- When a disc becomes dirty, wipe the disc from the center out with a cleaning cloth.



- After playing a disc, store the disc in its case. Do not leave the disc in places that are hot or humid.

Care of tapes
- Store tapes in their cases after use.
- Do not leave tapes near magnets, motors, television sets, or any source of magnetism. This will downgrade the sound quality and cause noise.
- Do not expose tapes to direct sunlight, or leave them in a car parked in direct sunlight.

To reset
If an unusual condition occurs in the display window, the cassette decks or CD player, reset the unit as follows.
1 Press **POWER** to turn off the power.
2 Press **POWER** to turn the power back on while pressing ■ **CLEAR**. Everything stored in memory after purchase is canceled.

If the power cannot be turned off in step 1 because of a malfunction, reset by disconnecting the AC cord and connect it again. Then carry out step 2.

TROUBLESHOOTING GUIDE

If the unit fails to perform as described in these Operating Instructions, check the following guide.

GENERAL
There is no sound.
- Is the AC cord connected properly?
- Is there a bad connection? (→ page 3 and 4)
- There may be a short circuit in the speaker terminals.
  → Disconnect the AC cord, then correct the speaker connections.
- Was an incorrect function button pressed?

Sound is emitted from one speaker only.
- Is the other speaker disconnected?

The output sound is not stereo.
- Is the Karaoke function turned on? (→ page 20)

An erroneous display or a malfunction occurs.
→ Reset the unit as stated below.

The unit blacks out when the power is turned off.
- Is the power economizing mode set to "ECO ON" or "ECO AUTO"? (→ page 6)

The power is not turn on.
→ Disconnect the AC cord, and connect it again in a few seconds.

TUNER SECTION
There is constant, wave-like static.
- Is the antenna connected properly? (→ page 4)
- Is the signal weak?
  → Connect an outdoor antenna.

The reception contains noise interferences or the sound is distorted.
- Is the system picking up external noise or multipath distortion?
  → Change the orientation of the antenna.
  → Move the unit away from other electrical appliances.

CASSETTE DECK SECTION
The tape does not run.
- Is deck 2 in pause mode? (→ page 13)

The sound is off-balance or not adequately high.
- Is the playback head dirty? (→ page 24)

Recording is not possible.
- Is the erasure prevention tab on the tape broken off? (→ page 14)
- Is the recording head dirty? (→ page 24)

Erasure is not possible.
- Is the erasure head dirty? (→ page 24)
- Is a metal tape being used?

High frequency sound is not emitted.
- Is a tape recorded without Dolby NR played back with the Dolby NR system operating? (→ page 13)
- Is the recording/playback head dirty? (→ page 24)

CD PLAYER SECTION
The CD player does not play.
- Is the disc correctly inserted? (→ page 9)
- Is the disc dirty? (→ page 24)
- Is the lens affected by condensation?
  → Wait approximately one hour and try again.

SPECIFICATIONS

Main unit CX-ND77

FM tuner section

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

AM tuner section

Tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

Amplifier section

Mid-high frequency amplifier	
Power output*	40 W + 40 W (200 Hz – 20 kHz, THD less than 1%, 8 ohms)
Total harmonic distortion	0.3% (26 W, 1 kHz, 8 ohms, DIN AUDIO)
Low frequency amplifier	
Power output*	120 W + 120 W (50 Hz – 200 Hz, THD less than 1%, 6 ohms)
Total harmonic distortion	0.3% (65 W, 75 Hz, 6 ohms, DIN AUDIO)

** without connecting to surround speakers*

Inputs	VIDEO/AUX: 300 mV (adjustable) MD: 300 mV (adjustable) MIC 1, MIC 2: 1 mV (10 kohms)
Outputs	LINE OUT: 150 mV SPEAKERS HIGH FREQ: accept speakers of 8 ohms or more SPEAKERS LOW FREQ: accept speakers of 6 ohms or more SURROUND SPEAKERS: accept speakers of 8 ohms to 16 ohms PHONES (stereo jack): accepts headphones of 32 ohms or more

Cassette deck section

Track format	4 tracks, 2 channels stereo
Frequency response	CrO_2 tape: 50 Hz – 16000 Hz Normal tape: 50 Hz – 15000 Hz
Signal-to-noise ratio	60 dB (Dolby B NR ON, CrO_2 tape peak level)
Recording system	AC bias
Heads	Deck 1: Playback head × 1 Deck 2: Recording/playback × 1, erase head × 1

Compact disc player section

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	83 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

General

Power requirements	120 V AC, 60 Hz
Power consumption	170W
Dimensions of main unit (W × H × D)	300 × 382.6 × 396.4 mm ($11^7/_8 \times 15^1/_8 \times 15^5/_8$ in.)
Weight of main unit	13.2 kg (29 lbs 2 oz)

Standby power consumption
With power-economizing mode off: 35 W
With power-economizing mode on: 0.9 W

Speaker system SX-WND77

Cabinet type	4 way, built-in subwoofer (magnetic shielded type)
Speakers	Subwoofer: 200 mm ($7^7/_8$ in.) cone type Woofer: 120 mm ($4^3/_4$ in.) cone type Tweeter: 60 mm ($2^3/_8$ in.) cone type Super tweeter: 20 mm ($^{13}/_{16}$ in.) ceramic type
Impedance	6 ohms/8 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W × H × D)	260 × 383 × 326 mm ($10^1/_4 \times 15^1/_8 \times 12^7/_8$ in.)
Weight	7.5 kg (16 lbs 9 oz)

Specifications and external appearance are subject to change without notice.

BBE SYSTEM

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DOLBY NR

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
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Please check the laws on copyright relating to recordings from discs, radio or external tape for the country in which the machine is being used.

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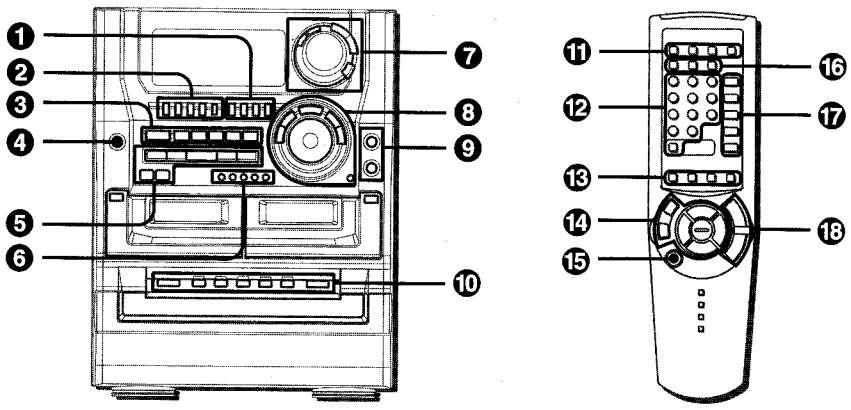

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